

AMENDMENTS TO THE CLAIMS

1. (Original) A system for remote configuration of a transaction processing device, comprising:
- a transaction processing device for providing a network service; and
 - a remote configuration server, wherein said configuration server is capable of communicating securely with said transaction processing device via a public communications network, wherein said transaction processing device is capable of communicating securely with said configuration server via said public network, and wherein said transaction processing device is capable of being remotely configured by said configuration server via said public communications network.
2. (Original) The system of claim 1, wherein said transaction processing device comprises:
- a first cryptographic services module for providing secure communication of information from said transaction processing device to said configuration server via said public communications network.
3. (Original) The system of claim 2, wherein said remote configuration server comprises:
- a second cryptographic services module for providing secure communication of information from said configuration server to said transaction processing device via said public network.
4. (Original) The system of claim 3, wherein said transaction processing device further comprises:
- a first communications protocol stack to facilitate communication over said communications network.
5. (Original) The system of claim 1, wherein said transaction processing device communicates securely over said public network without utilizing a host processor based system that is external to said device.
6. (Original) The system of claim 4, wherein said communications protocol stack is a TCP/IP stack.

7. (Original) The system of claim 4, wherein said configuration server comprises:

a configuration module, wherein said second cryptographic services module is part of said configuration module.

8. (Original) The system of claim 4, wherein said configuration server comprises:

a second communications protocol stack to facilitate communication with said transaction processing device over said communications network.

9. (Original) The system of claim 8, further comprising:

a certificate manager communicatively connected to said transaction processing device, wherein said certificate manager issues a terminal certificate to said transaction processing device.

10. (Original) The system of claim 9, wherein said certificate manager issues a server certificate to said configuration server.

11. (Original) The system of claim 9, wherein said terminal certificate is stored in said first cryptographic services module.

12. (Original) The system of claim 10, wherein said server certificate is stored in said second cryptographic services module.

13. (Original) The system of claim 11, wherein said terminal certificate is stored in said second cryptographic services module.

14. (Original) The system of claim 12, wherein said server certificate is stored in said first cryptographic services module.

15. (Original) The system of claim 11, wherein said first cryptographic services module further comprises at least one cryptographic algorithm for encrypting information transmitted from said transaction processing device to said configuration server.

16. (Original) The system of claim 12, wherein said second cryptographic services module further comprises at least one cryptographic algorithm for encrypting information transmitted from said configuration server to said transaction processing device.

17. (Original) The system of claim 9, wherein said certificate manager is part of said configuration server.

18. (Original) The system of claim 9, wherein said configuration server further comprises:

a security services module, wherein said security services module extracts a public key of said transaction processing device from said certificate of said transaction processing device to authenticate said transaction processing device.

19. (Original) The system of claim 18, wherein said cryptography services module signs a hash of configuration data about said transaction processing device retrieved from a database services module of said configuration server with a private key of the configuration server.

20. (Original) The system of claim 19, wherein said signed configuration data is encrypted with said extracted public key of said transaction processing device and transmitted to said transaction processing device over said public communications network.

21. (Original) The system of claim 19, wherein said signed configuration data is transmitted to said transaction processing device over said public communications network.

22. (Original) The system of claim 20, further comprising:
a web server for presenting a web based user interface to a user of said transaction processing device, wherein said user can update configuration data stored on said configuration server via said web based user interface.

23. (Original) The system of claim 22, wherein said web server comprises a user authentication module for verifying said user of said transaction processing device.

Claims 24 through 34 (Canceled).

35. (Original) A method for remotely configuring a transaction processing device, comprising the steps of:

authenticating said transaction processing device by a configuration server;

authenticating said configuration server to said transaction processing device, if said configuration server includes configuration data about said transaction processing device;

providing said configuration data to said transaction processing device by said configuration server;
storing said provided configuration data by said transaction processing device;
receiving by said configuration server an acknowledgment from said transaction processing device; and
storing said received information including said configuration data by said configuration server.

36. (Original) The method of claim 35, wherein said authenticating said transaction processing device step comprises the steps of:
initiating a connection with a communication network by said transaction processing device;
encrypting an identifying token by said transaction processing device utilizing a private key of said transaction processing device;
transmitting said encrypted identifying token via said communication network to said configuration server; and
decrypting said received identifying token by said configuration server utilizing a public key of said transaction processing device.

37. (Original) The method of claim 36, wherein said authenticating said configuration server step comprises the steps of:
encrypting an identifying number of said configuration server by said configuration server utilizing a private key of said configuration server;
transmitting said encrypted identifying number via said communication network to said transaction processing device; and
decrypting said received identifying number by said transaction processing device utilizing a public key of said configuration server.

38. (Original) The method of claim 37, wherein said step of providing configuration data comprises the steps of:
encrypting at least a portion of said configuration data by said configuration server;
and
transmitting said encrypted configuration data to said transaction processing device.

39. (Original) The method of claim 38, wherein said step of storing said provided configuration data further comprises the steps of:

verifying by said transaction processing device that it is the intended recipient of said received encrypted configuration information; and

verifying by said transaction processing device that the received encrypted information was sent by said configuration server.

40. (Original) The method of claim 35, wherein said transaction processing device is a point-of-sale terminal.

41. (New) A system for remote configuration of a transaction processing device, comprising:

a stand-alone transaction processing device for providing financial services processing, said transaction processing device having a data network interface providing communication between said transaction processing device and a public data network, said transaction processing device having a cryptography module providing secure communication via said public data network; and

a remote configuration server, wherein said configuration server securely communicates with said transaction processing device via said public data network to remotely configure said transaction processing device for use by a particular subscriber account in providing said financial services.

42. (New) The system of claim 41, wherein said public data network comprises the Internet.

43. (New) The system of claim 41, wherein said financial services processing comprises credit card transactions.

44. (New) The system of claim 41, wherein said financial services processing comprises debit card transactions.

45. (New) The system of claim 41, wherein said financial services processing comprises point of sale transactions.

46. (New) The system of claim 41, wherein said data network interface comprises a communications protocol stack implemented in hardware.

47. (New) The system of claim 41, wherein said cryptography module comprises cryptographic services implemented in hardware.

48. (New) The system of claim 41, wherein said transaction processing device further has a card reader.

49. (New) The system of claim 41, wherein said data network interface is adapted to provide communication between said transaction processing device and a private data network.

50. (New) The system of claim 49, wherein said transaction processing device comprises control circuitry selecting communication via said public data network and said private data network.

51. (New) The system of claim 49, wherein selection of communication via one of said public data network and said private data network is based upon information associated with a particular financial service transaction then being processed.